

Claims

- [c1] A network device for industrial control comprising:
- a network connection between said network device and an industrial control network;
 - a MAC address for said network device providing an address on the industrial control network, wherein said MAC address is a unique address of said network device;
- and
- a representation of the MAC address in a bar code format visible on said network device.
- [c2] The network device of claim [1]
- wherein the bar code is read by a bar code reader that communicates said MAC address to a DHCP server.
- [c3] The network device of claim [1]
- wherein the bar code is read by a bar code reader that communicates said MAC address to a BOOTP server.
- [c4] The network device of claim [1]

wherein the network device is a programmable logic controller.

- [c5] The network device of claim [1] wherein the industrial control network is an Ethernet network.
- [c6] The method of assigning a network address to a MAC address on an industrial control network comprising:
 - indicating the desire to replace a first network device with a second network device;
 - scanning a first bar code that contains a first MAC address of the first network device;
 - scanning a second bar code that contains a second MAC address of the second network device;
 - updating a network database, replacing said first MAC address with said second MAC address.
- [c7] The method of assigning a network address to a MAC address of claim [6] wherein said network database is a table for a BOOTP server.
- [c8] The method of assigning a network address to a MAC address of claim [6] wherein said network database is a table for a DHCP server.
- [c9] The method of assigning a network address to a MAC address of claim [6] wherein the network address is an Internal Protocol (IP) address.

- [c10] The method of assigning a network address to a MAC address of claim [6] further comprising the step of physically replacing the first device with the second device.
- [c11] The method of assigning a network address to a MAC address on an industrial control network comprising:
indicating the desire to add a network device to a network database;
scanning a bar code that contains a MAC address of the network device;
identifying an Internet Protocol (IP) address;
updating a network database, adding said MAC address to the network database, said addition including both said MAC address and said Internet Protocol (IP) address.
- [c12] The method of assigning a network address to a MAC address of claim [10] wherein the method of identifying said Internet Protocol (IP) address consists of scanning a bar code representation of said Internet Protocol (IP) address.
- [c13] The method of assigning a network address to a MAC address of claim [10] wherein said network database is a table for a BOOTP server.

[c14] The method of assigning a network address to a MAC address of claim [10] wherein said network database is a table for a DHCP server.